

REMARKS

The last Office Action has been carefully considered.

It is noted that Claims 1 and 7 are rejected under 35 USC 102(b) over the U.S. patent to Wallen.

Claims 2-6, 8 and 9 are rejected under 35 USC 103(a) over the U.S. patent to Wallen.

Also, the drawings and the disclosure are objected to.

In connection with the Examiner's objection to the drawings, applicants amended Figures 1-3 to designate them by a legend –Prior Art--.

In connection with the Examiner's issues raised in paragraph 3, it is respectfully submitted that reference character 4 has been used to designate the receiver unit in Figure 6b, but not in Figure 4. In Figure 6b applicant did not refer to reference unit 4 as including the rectifier. Figure 6b shows the rectifier 21 and the low pass 15 as different elements.

Figure 4 has been amended to correctly label the partial voltage U_t .

It is believed that the Examiner's grounds for the formal objections to the drawings and the disclosure should be considered as no longer tenable and should be withdrawn.

After carefully considering the Examiner's grounds for rejection of the claims over the art, applicant amended Claims 1 and 7 by incorporating into them the features of original Claims 2 and 8 correspondingly.

It is respectfully submitted that the ultrasonic flow sensor as now defined in amended Claim 1, and a method for detecting the reception time as now defined in amended Claim 7, clearly and patentably distinguish the present invention from the prior art applied by the Examiner.

The new features of the present invention as now defined in amended Claims 1 and 7 are not disclosed in the prior art applied by the Examiner and cannot be derived from it as a matter of obviousness. The U.S. patent to Wallen applied by the Examiner against the original claims discloses an ultrasound flowmeter, with which the reception time of the signal is determined from a zero crossing of the signal. Since the received ultrasound signal is composed of a pulse packet which have several zero crossings, the approaches are described which guarantee that always the same zero crossing is used for determination of the reception time. For this purpose the amplitude of a

pretrigger pulses is evaluated for determination of the correct zero crossing. The reception time is determined based on it.

In the present invention a threshold value is determined, so that when it is exceeded, this constitutes a feature to recognize that there is a signal reception. This threshold value changes in dependence on the amplitude of the signal.

These features are not disclosed in the patent to Wallen applied by the Examiner against the original claims.

Claims 1 and 7 have been additionally clarified by further features, which were originally defines as specific solutions in Claims 2 and 8, and now are incorporated into Claims 1 and 7.

Original Claims 1 and 7 were rejected as being anticipated by the U.S. patent to Wallen. As shown hereinabove, this reference does not disclose the new features of the present invention as now defined in amended Claims 1 and 7. In connection with this, it is believed to be advisable to cite the decision In *Re Lindenman Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir 1984) in which it was stated:

“Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim.”

Definitely, the patent to Wallen does not disclose each and every element of the present invention as now defined in amended Claims 1 and 7. Therefore, it is believed to be clear that the anticipation applied against the original claims should be considered as not tenable with respect to amended Claims 1 and 7 and should be withdrawn.

Some dependent claims were rejected over this reference under 35 USC 103(a) as being obvious. In connection with the obviousness rejection, it is respectfully submitted that the patent to Wallen does not disclose any hint or suggestion for a person of ordinary skill in the art at the time of the invention was made to derive the new features of the present invention as now defined in Claims 1 and 7. In order to arrive at the applicant's invention from the teaching of the reference, the reference has to be fundamentally modified by including into it the new features of the present invention which are now defines in Claims 1 and 7. However, it is known that in order to arrive at a claimed invention, by modifying the references the cited art must itself contain a suggestion for such a modification.

This principle has been consistently upheld by the U.S. Court of Customs and Patent Appeals which, for example, held in its decision *In Re Randol and Redford* (165 USPQ 586) that:

Prior patents are references only for what they clearly disclose or suggest, it is not a proper use of a patent

as a reference to modify its structure to one which prior art references do not suggest.

In view of the above presented remarks and amendments it is believed that Claims 1 and 7 should be considered as patentably distinguishing over the art and should be allowed.


As for the dependent claims, these claims depend on Claims 1 and 7 correspondingly, they share its allowable features, and they should be allowed as well.

Reconsideration and allowance of the present application is most respectfully requested.

Should the Examiner require or consider it advisable that the specification, claims and/or drawings be further amended or corrected in formal respects in order to place this case in condition for final allowance, then it is respectfully requested that such amendments or corrections be carried out by Examiner's Amendment, and the case be passed to issue. Alternatively, should

the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, he is invited to telephone the undersigned (at 631-549-4700).

Respectfully submitted,



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